

ATTACHMENT 2

**FINAL APPROVAL LETTER FROM EPA TO IBM
DATED MAY 19, 2000**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

MAY 19 2000

May 19, 2000

Mr. Salvatore J. Tranchina, P.E., Manager
Environmental/Chemical
Engineering and Operations
International Business Machines Corporation
East Fishkill Facility
1580 Route 52, Bldg 386
Hopewell Junction, NY 12533-6531

**Re: EPA Recommendation Regarding IBM East Fishkill Project XL Proposal for
Hazardous Waste Recycling**

Dear Mr. Tranchina:

I am pleased to inform you that EPA has formally selected your XL proposal as a potential Project XL pilot. We congratulate you on your selection and thank you and the rest of the IBM staff for your hard work on getting the proposal approved.

We invite you now to work with EPA staff and appropriate stakeholders on the next stage of your XL project—developing a draft Final Project Agreement ("FPA"). While this letter does not represent final EPA approval of the project, Agency staff both at headquarters and at Region II believe your proposal has significant merit and look forward to working with you to develop your project further.

Your proposal requested relief from hazardous waste regulatory requirements for certain F006 hazardous waste sludge (designated as B/690 sludge at your facility) that is to be recycled by being used as an ingredient in the production of cement (F006 wastes recycled in this manner would normally be subject to RCRA regulation). Our interest in your proposal stems from our conclusion that this XL proposal has the potential to result in superior environmental performance by allowing for an environmentally sound recycling scenario to be realized outside of RCRA regulatory controls. The experience and data gained from this project may also be useful to EPA in assessing whether broader regulatory relief for this type of recycling practice may be feasible and environmentally protective.

As part of realizing this project's potential, we anticipate discussing with you during FPA negotiations the following items:

1. Regulatory Flexibility

IBM proposes that EPA provide an exclusion to the definition of solid waste for a hazardous secondary material that is used as an ingredient to produce a product (cement) that will be used directly on the land (i.e., use constituting disposal). One focus of developing the Final Project Agreement (FPA) will be to structure the regulatory flexibility in a way that provides the most potential to transfer the regulatory flexibility to the national hazardous waste program, should the Agency determine that such an action is warranted. Towards that end, we expect to negotiate and set parameters regarding the constituent concentrations in the sludge, management conditions to ensure that the sludge is not released to the environment, and a means of assessing the effectiveness and safety of using the sludge as an ingredient in cement.

This XL project provides EPA with the unique opportunity to examine those criteria and conditions that would ensure that this recycling scenario will be protective. For example, one possible regulatory outcome of this XL project could be the promulgation of a generic table of constituents and concentrations that would identify the F006 sludges (and possibly other metal-bearing wastes) that would be amenable as a substitute for other ingredients in cement manufacture. Likewise, another possible outcome of this XL project could be a list of the minimum conditions under which such hazardous secondary materials should be managed (outside of RCRA jurisdiction) to ensure that they do not pose a threat to human health and the environment prior to being recycled (e.g., storage to prevent release through wind dispersal). The regulatory flexibility needed to implement this XL project, as well as information that could be useful in transferring the results of the project to the national program, will need to be specifically described in the development of the FPA and incorporated into a legal implementing mechanism in order to implement the final project.

2. Superior Environmental Performance

All XL projects must result in better environmental performance than would be achieved absent Project XL. As stated earlier, the immediate superior environmental performance (SEP) of this proposal – i.e., the conservation of less than 1% of the raw material ingredients that would normally be used to produce cement – is relatively minor compared with the potential SEP that could be realized during the “transferability” phase of the XL project (e.g., with an estimated 360,000 to 500,000 tons/year of F006 wastes being generated nationally, even if only a small percentage of this total volume is amenable to being used as an ingredient in cement, that could be a significant volume). Defining the exact level of superior environmental performance that IBM and EPA hope to achieve through this XL project will need to be articulated further during FPA negotiations.

3. Monitoring and Reporting

Specific monitoring and reporting requirements regarding the progress of this XL project

will also need to be discussed and decided on during FPA negotiations with EPA, the State of New York, and relevant stakeholders. These requirements will serve to verify that the XL project is being conducted in compliance with the parameters detailed in the FPA and the legal implementing mechanisms as well as to ensure that the recycling scenario being addressed in this XL proposal is environmentally sound and implementable on a national basis. One specific question worth noting, and which will be addressed in the FPA negotiation, is the fate of the relatively high concentrations of calcium fluoride in the sludge when the sludge is used as an ingredient to produce cement and what, if any, impact the fluoride has on the cement product.

Again, I thank you for your participation in EPA's Project XL and look forward to working with your team to develop the FPA and implement this project. EPA has assembled an Agency-wide team to work with you and your stakeholders in the next phase of the project. This team will be led by George Meyer in Region II (212/637-4144) and Mitch Kidwell at EPA Headquarters (202/260-2515).

Should the FPA be signed, the IBM East Fishkill XL Project will become an official XL pilot. I know from speaking with my staff that you are highly committed to conducting innovative projects that improve our system of environmental protection. If I can be of any assistance in expediting the development and review of your Final Project Agreement, please do not hesitate to call.

Sincerely,



William J. Muszynski
Deputy Regional Administrator

cc: Richard Farrell, EPA
Betsy Shaw, EPA
George Meyer, EPA
Mitch Kidwell, EPA